

a first pressure chamber having a first inner pressure disposed above the retaining ring;

a second pressure chamber having a second inner pressure disposed on the carrier, wherein a relative height between the retaining ring and the carrier can be adjusted by changing the first and second inner pressures; and

an automatic control system respectively coupled to the first pressure chamber and the second pressure chamber for adjusting a relative height between the carrier and the retaining ring, wherein the automatic control system comprises a converting device for transforming the first and second inner pressures into feedback digital signals, and a controlling device coupled to the converting device for comparing the feedback digital signals and producing digital signals from the feedback digital signals, and a regulating device coupled to the controlling device for transforming the digital signals into pressure values for adjusting fluid pressures in the first and second pressure chambers.

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7. (Amended) A wafer polishing head for planarizing a wafer, comprising:

a carrier for loading the wafer;

a retaining ring surrounding the carrier;

a first pressure chamber having a first inner pressure disposed above the retaining ring;

a second pressure chamber having a second inner pressure disposed on the carrier; and

an automatic control system respectively coupled to the first pressure chamber and the second pressure chamber, the automatic control system comprising converting devices for transforming the first and second inner pressures into feedback digital signals, a controlling device coupled to the converting devices for comparing the feedback digital signals and producing digital signals from the feedback digital signals, and regulating devices coupled to